

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of: Vijayavel Bagavath-Singh

Application No.: 10/525,938

Confirmation No.: 4878

Filed: February 25, 2005

Art Unit: 3742

For: PART-GEOMETRY INDEPENDENT REAL  
TIME CLOSED LOOP WELD POOL  
TEMPERATURE CONTROL SYSTEM FOR  
MULTI-LAYER DMD PROCESS

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Examiner: T. S. Tran

**RESPONSE TO NON-FINAL OFFICE ACTION**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action dated November 24, 2009, the Examiner's attention is directed to the following remarks.

Claims 1-4, 8 and 9 now stand rejected under 35 USC §103 over Suh in view of Ito. However, for the reasons set forth herein below, Applicant believes that *prima facie* obviousness has not been established.

Suh resides in laser cladding and direct metal manufacturing and, in particular, to a method of real-time monitoring and controlling the height of a cladding layer using image photographing and image processing technology (Suh, [0001]). The height is controlled by monitoring the position and the height of a melt pool and controlling as the intensity of laser power, a parameter which Suh considers to be one of the most important process variables (Suh, Abstract)).

The essence of Suh is set forth at [0083]: